"WE CAN'T SOLVE PROBLEMS BY USING THE
SAME KIND OF THINKING WE USED
WHEN WE CREATED THEM."
Albert Einstein

# Kansas Traffic Records Coordinating Committee Strategic Plan



2021 - 2025

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#### The Plan: A Quick Reference

#### MISSION

The TRCC is committed to the reduction of fatalities and serious injuries on Kansas State roadways by providing timely, accurate, integrated, and accessible traffic records data

#### VISION

To develop the primary integrated data destination for creating life-saving strategies which improve the quality of life for the traveling public on Kansas roadways.

#### GOAL 1: Traffic Safety Data

#### Strategies:

- Automate Data Capture: Develop means by which to more effectively capture traffic safety data.
- Increase Data Completeness: Ensure data is captured as complete as possible even when the data may come from disparate sources or at different points in time.
- Increase Data Accuracy: Allow for information to be exchanged between stakeholders in an automated fashion and associated between disparate data sources accurately.

#### **GOAL 2: Information Sharing**

#### Strategies:

- Improve Timeliness: Furnish critical traffic safety information to stakeholders with enough time for them to properly use it.
- *Increase Consistency:* Ensure the information being provided to stakeholders remains consistent regardless of when the information is requested.
- Improve Operational Integration: Bring together disparate traffic safety data sources to provide complete and accurate information to operational stakeholders (e.g. law enforcement officer, judge, etc.).
- Increase Accessibility: Ensure that stakeholders who need the information, always have access to it when needed.

#### GOAL 3: Analysis

#### Strategies:

- Improve Analytical Integration Bring together disparate traffic safety data sources in a statistical fashion to provide complete and accurate information to analytical decision makers (e.g. legislators, traffic planners, etc.).
- Improved Analysis Capabilities Implement processes, tools and technologies which improve the organization's ability to aggregate and statistically report on data collected.

#### **OBJECTIVES**

- Reduced time from the capture of data to the availability of the information.
- Increased the uniformity and linking of data across all participating systems
- Increased location accuracy for crash reports and other traffic events.
- Increased the completeness of traffic data by capturing any missing information.
- Reduce the time associated with capturing information at the source.
- Reduce the staff time associated with the entry of information into the central repositories.
   Reduce the time associated with the compilation of statistical reports to support traffic safety initiatives.

- Provide better access to traffic record statistical information to state and local agency personnel.
- Improve access to comprehensive traffic record information about an individual to state and local agency personnel.
- Increase the number of statistical analysis tools available to state and local agency personnel.
- Ensure the system is compatible with the emerging national traffic records information standards.
- Leverage available state or agency infrastructure tools to minimize long-term costs.
- Utilize an architecture that is both flexible for current needs and adaptable for future needs.

## Why are Traffic Safety Data Records Important?

Traffic records safety data serves as the primary source of knowledge about Kansas's transportation environment. The State's traffic records system consists of numerous systems gathering, processing, and sharing information about crashes, location and make-up of the state's roadways, registered vehicles and licensed drivers, citation, adjudication and health data. Together these systems provide the underpinnings of a coordinated effort to reduce serious injuries and fatalities on Kansas's roadways.

Kansas' traffic information and data systems are comprised of hardware, software, and accompanying processes that capture, store, transmit, and analyze a variety of data. The following information is used to make up Kansas's Traffic Records System:

- Traffic fatalities and serious injuries
- All statewide traffic crashes
- Driver citations
- Criminal history and judicial outcome data
- Driver licenses and registered vehicles
- Commercial motor vehicles
- Emergency Medical Systems
- Trauma and inpatient hospital records
- Emergency department and clinic records
- Roadway geometrics and features
- Traffic volumes, traffic mix and freight
- Location information via Geographic Information Systems

Each component of this system provides key information for diagnosing the contributing factors to crashes and for the supporting decisions related to reducing fatalities on Kansas roadways. Project requests from participating agencies are reviewed by the TRCC for the project's ability to meet the TRCC's goals. Projects are evaluated against its ability to integrate with other data sources, improve data storage, deploy analytical tools and increase electronic data capture among others.

# Organizational Principles

This 2021-2025 TRCC Strategic Plan provides the framework that represents the organization's principle values. The following principles have been established for the traffic records community:

- The state will support local agencies in their effective use of resources.
- The state will maintain agency and systems autonomy while building on an integrated information-capture and information-sharing approach.
- The state will seek out short-term benefits and improvements to the existing systems while building a long-term integrated system.
- Incremental build and improve traffic safety systems as funding permits.
- Information available to community in near real-time.
- The state will focus equally on high-volume and low-volume agencies to meet the objectives.

#### TRCC Governance Structure

To promote the development of a fully integrated Traffic Records System (TRS) affecting multiple agencies, Kansas developed an organizational structure that allows interaction between the partner agencies, as well as communication, collaboration and cooperation with organizations governing similar integration efforts. Figure 1 summarizes the governing bodies leveraged throughout the state's ongoing traffic improvement efforts.

This organizational structure aligns the TRCC effort with Kansas Criminal Justice Information System Committee (KCJIS), as the two programs are similar in nature and related in scope. By ensuring communication with the KCJIS Committee, the TRCC can ensure that the two programs are not duplicating each other's efforts and that each program is able to leverage and expand upon work performed by the other.

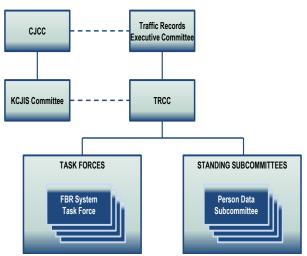


Figure 1: TRCC Organizational Structure

#### **TRCC Membership**

The TRCC is a partnership of federal, state, and local stakeholders from transportation, law enforcement, criminal justice, and health disciplines. The TRCC's membership includes state and local agencies and organizations that have a shared mission to reduce the number of fatalities and severity of injuries related to trauma. The TRCC is the Chief Information Officer (CIO)-level planning and implementation committee. The committee meets quarterly and serves as the TRS program's steering committee. The TRCC is the governing body and primary means of internal and external communication for the TRS project. It serves as a facility for establishing priorities and consensus among traffic safety agencies. The TRCC also reviews federal and state funding for projects designed to integrate and aid in accessing traffic safety related data. The TRCC Coordinator is Jim Hollingsworth.

The TRCC membership consists of members who represent the core functional data systems. The following chart lists the represented agency, the position of the member and the functional area they are representing.

Organization & Position	Functional Area Represented
Kansas Department of Transportation, Kansas Traffic Safety Bureau, Program Manager	TRCC Chair, Strategy, Data & Integration
Kansas Department of Transportation, Kansas Traffic Safety Bureau, Data Coordinator	Strategy, Data & Integration
Kansas Highway Patrol, CIO KHP	Citation/Adjudication
Kansas Department of Health and Environment, Senior Epidemiologist	Injury Surveillance
Board of Emergency Medical Services, Executive Director	Trauma
Office of Judicial Administration, CIO	Citation/Adjudication
Kansas Criminal Justice Information Systems, Executive Director	Data & Integration
Kansas Bureau of Investigation, CIO	Crash System
Kansas Department of Revenue, Director of Driver Services	Driver
Kansas Department of Revenue, Director or Vehicles	Vehicle
David LaRoche – Safety/Traffic Engineer	Federal Highway Admin
Tim Kurowski – KHP	Citation/Adjudication

KS Assoc of Police Chiefs, Ed Klumpp	Citation/Adjudication
KDOT, Kansas Traffic Safety Bureau, Asst. Program Manager	Strategy
University of Kansas DASC, Director	GIS
Kansas Department of Revenue, Director of Vehicles	Vehicles
Kansas Department of Revenue, Director of Driver Services	Drivers
Office of Information Technology Services, Systems Engineer	Crash
Kansas Bureau of Investigation, Assistant Director	Data & Integration
Kansas Department of Transportation, Professional Civil Engineer	Roadway
Kansas Bureau of Investigation, Asst Chief Information Officer of Deliver	Data & Integration
Office of Judicial Administration, Programmer/Analyst II	Citation/Adjudication
Kansas Department of Transportation, Public Service Executive Innovative Technology	Data & Integration
Kansas Department of Health & Environment, Kansas Trauma Program Director	Trauma, Injury Surveillance
Kansas Bureau of Investigation, Incident Based Reporting Unit Manager	Data & Integration
Kansas Department of Transportation. State Safety Engineer	Strategic Planning
Kansas Department of Transportation, Asst. Traffic Safety Program Manager	Strategic Planning

#### Kansas Criminal Justice Information System

Because a large portion of traffic safety data is generated by law enforcement, the statewide governing body surrounding law enforcement information sharing is a key participant in the governance of the state's TRS. The KCJIS Committee is a peer group to the TRCC that also regularly meets to discuss ways to improve public safety within the state through improved information sharing.

## **Standing Subcommittees**

To determine the ongoing progress of certain aspects of the program, the TRCC has the authority to charter standing subcommittees to provide input and direction for areas that require specific expertise. For example, the TRCC may require a subcommittee be formed to maintain the exchange and responsibility or developing policy and plan direction in certain aspects of the program requiring a high level of expertise.

#### **Task Forces**

Various ad hoc task forces are formed as projects demand. The task forces are largely meant to be composed of various stakeholders brought together to research or determine the requirements for a specific project. The task forces provide input and direction to individual projects and may be dissolved once the project is complete.

Together, these groups develop and monitor the state's Traffic Records Committee strategic plan.

## Mission, Vision, Goals and Strategies

#### Mission

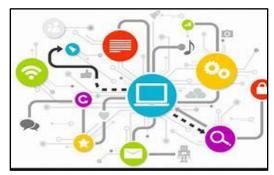
The TRCC is committed to the reduction of fatalities and serious injuries on Kansas roadways by providing timely, accurate, integrated, and accessible traffic records data.

#### Vision

To develop the primary integrated data destination for creating life-saving strategies which improve the quality of life for the traveling public on Kansas roadways.

Pursuing this vision will allow the state to achieve the following outcomes:

- Centralized data aggregation for analysis
- Accurate, timely, location-based data
- Quality data collection
- Advanced data analysis and research skills
- 100% electronic traffic records data
- Instant, automated data capture
- Sustainable traffic records systems
- High level of customer satisfaction with data



# Strategic Goals and Objectives

#### GOAL 1: Traffic Safety Data:

#### Strategies:

- Develop means to capture traffic safety data more effectively.
- Promote legislative agendas to support traffic records systems
- Ensure data is captured as complete as possible even when the data may come from disparate sources.
- Ensure accurate information is exchanged between disparate data sources.
- Promote innovative data collection solutions.
- Strive to align individual agency priorities with TRC and Drive to Zero goals.
- Continue to invest towards the goal in achieving 100% electronic records.
- Ensure that systems have a long-term plan for sustainable funding and a plan for maintenance.

#### Objectives:

- Sustainable traffic records systems
- 100% electronic traffic records data
- Accurate, timely, location-based data
- High level of customer satisfaction with data
- Automated data capture

#### **GOAL 2: Information Sharing**

#### Strategies:

- Establish governance for traffic records data sharing and integration.
- Develop data quality processes between partner agencies to improve information quality.
- Support data integration for traffic records data sets.
- Standardize fields to support data linkages.
- Further develop guidelines for deduplication and linkage of data.
- Pursue statutory changes to allow greater collection and access to traffic records systems.

#### Objectives:

• Increase data uniformity.

- Improve the ability to aggregate and statistically report on data collected.
- Provide accurate, timely, location-based data
- Advanced data analysis and research skills
- High level of customer satisfaction with data

#### **GOAL 3: Analysis**

#### Strategies:

- Promote innovative data collection solutions
- Improve timeliness and quality of traffic safety data
- Modernize traffic data systems
- Improve map-based crash intelligence for local law enforcement
- Maintain and enhance electronic DUI data for analytical and reporting purposes for better decision making
- Develop predictive analytics tool for law enforcement
- Create an environment to support data quality reporting and feedback mechanisms to stakeholders

#### Objectives:

- Quality data collection for improved analysis
- 100% electronic traffic records data
- Accurate, timely, location-based data
- Advanced data analysis and research skills
- High level of customer satisfaction with data

#### GOAL 4: Promote collaboration and innovation.

#### Strategies:

- Continue to foster a shared vision and spirit of collaboration embraced by all stakeholders.
- Provide on-going communication with TRC members, and their internal and external stakeholders, about the traffic records vision and goals of the TRC.
- Support on-going training and communication tools to enable innovation and collaboration.
- Identify key performance measures and develop in a data dashboard that is accessible to all TRC members.

#### Objectives:

- Enhance the spirit of cooperation and collaboration among TRCC members.
- Reduce duplication of data
- Leverage agency infrastructure tools
- Quality data collection for improved analysis
- Advanced data analysis and research skills
- Ensure the system is compatible with the emerging national traffic records information standards.
- High level of member satisfaction with data

# TRCC Alignment to National, State and Local Goals

The TRCC is a partnership of federal, state, and local stakeholders from transportation, law enforcement, criminal justice, and health disciplines. The TRCC's membership includes state and local agencies and organizations that have a shared mission to reduce the number of fatalities and severity of injuries related to trauma. All these organizations participate in the development of the TRCC strategic plan, and thereby align the mutual strategic goals of each respective agency with statewide goals for traffic records.

### Updating and Reporting Progress on the TRCC Strategic Plan

The TRCC Strategic Plan is a living document that is designed to guide the state's efforts in traffic records, including the development of project proposals, coordination among TRCC partners, and evaluation of the effectiveness of the chosen strategies and projects. Each year, the TRCC conducts an evaluation of Kansas's Traffic Records Strategic Plan. This evaluation will consider changes federal, state, and local priorities, as well as emerging technology and how these may influence or drive updates to the plan.

#### Kansas Strategic Highway Safety Plan

The Kansas State Highways Safety Plan is a data-driven approach to reducing traffic fatalities and serious injuries. Timely, accurate, integrated, and accessible data is the foundation for targeting resources and monitoring progress toward reducing traffic fatalities and serious injuries. The TRCC supports the state's highway safety plan by providing quality data needed to:



- Diagnose the contributing factors to crashes
- Assess the effectiveness of implemented countermeasures, and
- Identify innovative and targeted strategies that will have the greatest impact on achieving the goal of zero deaths and serious injuries.

#### National Agenda for Transportation Safety

The National Highway Traffic Safety Administration is a critical partner in Kansas' effort to reduce traffic fatalities and serious injuries. NHTSA provides funding and oversight for the Traffic Records Coordinating Committee.



NHTSA provides coordinated guidance, outreach, best-practices, and training and technical assistance designed to improve the timeliness, accuracy, completeness,

uniformity, integration, and accessibility of state crash, driver, vehicle, roadway, citation and adjudication, and injury surveillance databases. The Traffic Records System helps states improve their traffic safety data collection, management, and analysis capabilities through evaluation, training, and technical assistance.

#### **NHTSA Model Performance Measures**

The National Highway Traffic Safety Administration has identified 61 model performance measures for the six core State traffic records data systems -- crash, vehicle, driver, roadway, citation/adjudication, and EMS/injury surveillance. These model performance measures address the six performance attributes -- timeliness, accuracy, completeness, uniformity, integration, and accessibility. The measures are utilized by the NHTSA and the TRCC to monitor the development and implementation of traffic record data systems, strategic plans, and data improvement grant processes. These common performance measures are expected to help stakeholders quantify systemic improvements to their traffic records systems.

#### Core Traffic Records Data Systems

The model performance measures were created for the six core traffic data systems.

- 1. Crash: The State repository that stores law enforcement officer crash reports.
- 2. Vehicle: The State repository that stores information on registered vehicles within the State (also known as the vehicle registration system). This database can also include records for vehicles not registered in the State—e.g., a vehicle that crashed in the State but was registered in another State.
- 3. Driver: The State repository that stores information on licensed drivers within the State and their driver histories. This is also known as the driver license and driver history system. The driver file also could contain a substantial number of records for drivers not licensed within the State—e.g., an unlicensed driver involved in a crash.
- 4. Roadway: The State repository that stores information about the roadways within the State. It should include information on all roadways within the State and is typically composed of discrete sub-files that include roadway centerline and geometric data, location reference data, geographical information system data, travel and exposure data, etc.
- 5. Citation/Adjudication: The component repositories, managed by multiple State or local agencies, which store traffic citation, arrest, and final disposition of charge data.
- 6. EMS/Injury Surveillance: The component repositories, managed by multiple State or local agencies, which store data on motor vehicle-related injuries and deaths. Typical components of an EMS/injury surveillance system are pre-hospital EMS data, hospital emergency department data systems, hospital discharge data systems, trauma registries, and long-term care/rehabilitation patient data systems.

#### **Performance Attributes**

The attributes are applied somewhat differently for each of the data systems. These criteria take a broad view of performance measures. For example, performance on some of the model measures may not change from year to year. Once agencies have incorporated uniform data elements, established data linkages, or provided appropriate data file access, further improvement may not be expected. Some data systems cannot use all measures. Some measures may require a set of critical data elements be defined. Many measures require each data system to define their own performance goals or standards. The model measures should be a guide to assess the data systems to improve their performance. Each data system should select performance measures most appropriate to the circumstance and should define and modify them to fit their specific needs. Generally, the performance attributes were developed to capture the following core characteristics.

- 1. <u>Timeliness:</u> Timeliness reflects the span of time between the occurrence of an event and entry of information into the appropriate database. Timeliness can also measure the time from when the custodial agency receives the data to the point when the data is entered into the database.
- 2. <u>Accuracy:</u> Accuracy reflects the degree to which the data is error-free, satisfies internal consistency checks, and does not exist in duplicate within a single database. Error means the recorded value for some data element of interest is incorrect. Error does not mean the information is missing from the record. Erroneous information in a database cannot always be detected.
- 3. <u>Completeness:</u> Completeness reflects both the number of records that are missing from the database (e.g., events of interest that occurred but were not entered into the database) and the number of missing (blank) data elements in the records that are in a database. In the crash database, internal completeness reflects the amount of specified information captured in each individual crash record. External crash completeness reflects number or

percentage of crashes on which crash reports are entered into the database. However, it is not possible to determine precisely external crash completeness as it is impossible to determine the number of unreported crashes. The measures in this report only address internal completeness by measuring what is *not* missing.

- 4. <u>Uniformity</u>: Uniformity reflects the consistency among the files or records in a database and may be measured against some independent standard, preferably a national standard. If the same data elements are used in different files, they should be identical or at least compatible (e.g., names, addresses, geographic locations). Data collection procedures and data elements should also agree with nationally accepted guidelines and standards such as the Model Minimum Uniform Crash Criteria (MMUCC).
- 5. <u>Integration</u>: Integration reflects the ability of records in a database to be linked to a set of records in another of the six core databases—or components thereof—using common or unique identifiers. Integration differs in one important respect from the first four attributes of data quality. Integration is a performance attribute that always involves two or more traffic records subsystems (i.e., databases or files). For integration, the model performance measures offer a single performance measure with database-specific applications that typically are of interest. The samples included are of course not exhaustive.
- 6. <u>Accessibility</u>: Accessibility, which reflects the ability of legitimate users to successfully obtain desired data. Accessibility is measured in terms of customer satisfaction. The accessibility of the database or sub-file is determined by obtaining the users' perceptions of how well the system responds to their requests. Each database manager should decide which of the legitimate users of the database would be classified as principal users, whose satisfaction with the system's response to requests for data and other transactions will provide the basis for the measurement of accessibility.

#### **Current State**

#### **Traffic Records Grant Process**

Traffic Records is one of the priority areas to which the TRCC awards funding in accordance with NHTSA regulations for funding Traffic Records. The TRCC considers grants that support initiatives that enhance the core highway safety databases: crash, driver, vehicle, citation and adjudication, roadway and injury surveillance. Per 23 CFR1300.22, NHTSA grant funds awarded shall be used to make quantifiable, measurable progress improvements in the accuracy, completeness, timeliness, uniformity, accessibility or integration of data in a core highway safety database.



In addition to NHTSA funding, in 2007 the Kansas legislature passed KSA 75-5080 et seq. in 2007, which established the Transportation Records Enhancement Fund (TREF) for the purpose of enhancing and upgrading the traffic records systems in the state. Although essential, NHTSA grants must strictly comply with specific purposes. The TREF has greater application flexibility for filing in the gaps the NHTSA funding may not strictly apply.

All project proposals for new or continuing projects are submitted through the TRCC annual grant process each year. NHTSA grants awarded are for the federal fiscal year, running October 1 – September 30.

As a guideline, below is the timeline for Traffic Records Committee projects grant requests:

Milestone	Month
Grant Proposals due	January
TR proposals distributed to TRCC Workgroup for evaluation	February
TRCC Executive Committee meets to discuss package of TR grants	March
TRCC Executive Council meets to approve individual TR projects	May
Project agreements signed	Aug/Sept
Grant funding available	October 1

#### Strategic Goals Achieved

The TRCC has made tremendous strides towards achieving its goals. The chart below depicts the current and planned projects and how they are aligned with the NHTSA performance measures. The chart includes projects that were identified in previous year's Strategic Plans and are underway, included in this plan or are targeted for future TRCC focus. Some of the systems listed below have either been deployed and improvements are planned or are in the process of being deployed.

	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Crash						
Vehicle						
Driver						
Roadway						
Citation						
EMS/Injury						
DUI						

Current	Future	Not Yet
Focus	Focus	Applicable

#### **Gaps and Barriers**

While much has been accomplished, there are gaps and barriers that must be overcome if progress is to continue.

- Progress on data sharing and integration remains slower than some expect, and some major barriers exist.
  - o The TRCC is not able to leverage resources to the highest degree possible because the approach to seeking funding and investments to support the Committee's efforts is not coordinated. The main driver is the stresses agencies face within their own internal environments and the challenge of keeping attention focused on traffic records goals and projects amid competing policy, reduction in human capitol, and budgetary priorities. Resource constraints and the priority some TRCC partners have had to place on the maintenance or replacement of legacy systems is a barrier to aligning the TRCC's resources to address significant issues of data collection, sharing, and integration.
  - o Access to different data sets residing in TRCC member agencies is significant. For example, KDOR continues to perform and complete system migration for the driver dataset. Getting the right expertise in the room to understand and address the issues of security, confidentiality, legal concerns, and technical capabilities/deficits is a key reason why progress is slow.
  - O With improved systems and tools, technical barriers are becoming fewer and the biggest data sharing hurdles are HIPAA laws and public disclosure concerns. The Kansas Department of Revenue (KDOR) has a multi-year initiative to modernize its IT systems, which is affecting its ability to fully participate in this area in the short-term, but the changes may contribute to higher data integrity and standardization. The Office of Office of Judicial Administration (OJA) is resource constrained and the replacement of its legacy systems is its highest priority, making it difficult for the agency to participate in activities that would further data sharing. Data integration projects across and within agencies are slowed by lack of a common personal identifier. Data is collected and retention policies are driven more by compliance and not future utility.
  - o The relationships and level of collaboration among the partner agencies within the TRCC are strong. Strong relationships of trust and collaboration have been built among the TRCC partner agencies over

- time. This has helped the TRCC sustain their inter-dependencies even under the strain of disagreements, particularly in the area of data sharing. Even so, there is not a common understanding of "where we are going and how."
- o The 2020 pandemic has presented significant issues with limited access to personnel and technological challenges. Many agencies were not prepared to transition to a fully remote workforce. It is expected that these issues will be exacerbated by the degradation of the state's revenues as a result of the state-wide shutdown.
- There are existing concerns about data timeliness. These concerns include several different data sets within several agencies that are part of the TRCC.
  - o Efforts to address some of the identified timeliness issues are already underway; however, there is a need for continued focus and attention on this issue, as more agencies begin using the data for predictive analysis and decision-making. Systemically, the TRS was built to electronically accept a single file structure from the KHP. As local law enforcement agencies embrace systems for citations and crashes, the inability to accept an electronic file necessitates the need for data entry from paper reports sent to the state. In addition, state agencies lack dedicated staff resources to sufficiently support data analysis and integration.
  - o TRCC members also feel it is time for an infusion of new ideas into fulfilling the traffic records data mission. Now, the conversation needs to turn to: "What's is TRCC's next step?" The TRCC continues to innovative integration methodologies and monitors a few key states in specific areas for best practices that could inspire their efforts with fresh ideas and alternative approaches to providing higher quality data, better analysis, and useful tools to customers.
- The TRCC has not been able to leverage resources to the highest degree possibly because the approach to seeking investments beyond NHTSA grant funding to support TRCC's efforts is not well coordinated across agency boundaries. It is also expected the effects of the ongoing COVID-19 pandemic, state-wide shutdown and subsequent significant loss of state revenues will place further pressure on state financial resources and diminish the number of state projects and initiatives being able to be undertaken in the near future.

#### 2015-2020 TRCC Performance Measure

The TRCC utilizes the NHTSA traffic records model performance measures to gauge the timeliness, accuracy completeness, uniformity, integration, and accessibility of traffic safety data.

These measures are updated and reviewed annually. In addition to these TRCC performance level measures, individual project managers track performance measures at the project level and for the specific objectives or strategies that they own individually.

The following performance measure demonstrates significant, system-wide performance. The following graph displays the overall summary of the trend in metrics in terms of year-over-year percentage change.

# 2020 NHTSA Traffic Records Assessment Findings

Evaluations of state traffic records system capabilities are performed every five years and evaluated against NHTSA program ideals. From May through July 2020, the traffic records coordinator performed a NHTSA supplied self-assessment of Kansas's traffic records system. At the conclusion of the assessment, the coordinator documented the assessment averages for each core database below.

Overall Average	87.1%
Vehicle	71.0%
Driver	90.9%
Injury/Surveillance	97.5%
Citation/Adjudication	74.4%
Roadway	95.6%
Crash	78.6%
Strategic Planning	93.1%
Data Use & Integration	86.7%
TRCC	96.1%

# 2021-2025 Proposed Programs

The following pages provide summary information for the planned projects for the 2021-2025 implementation cycle. Each project may have multiple contracts associated with a project. The projects are listed by the core assessment areas. Each project contains the descriptions of the project and contracts, the TRCC goals and Objectives, the 2020 NHTSA Assessment Recommendations and 2020 Self-Assessment score. Each contract contains the 5 Year anticipated schedule, cost, funding source and the NHTSA model performance measure to be used to determine the level of success of the proposed contract.

#### Crash

2020 NHTSA Traffic	TRCC Goal/Projects/Objectives and Performance Measures
Records Assessment Recommendation	Goal #2: Information Sharing
Crash: Interfaces - Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.  2020 Assessment Score: 53.3%	Project: Master Data Management Project Description: This project will improve the methods of receiving electronic crash information in the field more quickly and efficiently. This includes reviewing and documenting the current Information Exchange Packet Document (IEPD) for import to the Traffic Records System (TRS) and continuing support for the TRS system.  TRCC Objectives:  Increase the uniformity and linking of data across all participating systems.  Ensure the system is compatible with the emerging national traffic records information standards.  Leverage available state or agency infrastructure tools to minimize long-term costs.  Utilize an architecture that is both flexible for current needs and adaptable for future needs.  Contracts:  1.1 Information Exchange Packet Document: This project will update the IEPD developed in 2009 to document the current system input configuration. Subsequent contracts will be pursued to convert to an .xml format to accommodate disparate software systems.  Anticipated Contract Schedule: Q3 2021 – Q1 2022  Anticipated Contract Cost: \$80,000  Funding Source: NHTSA Grant Funding  Performance Measure:  Accuracy  The percentage of crash records with no errors in critical data element.  Completeness  The percentage of records with no missing critical data elements.
Crash: Procedures and Process Flows - Improve the procedures/process flows with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	1.2 TRS 2.0 Rebuild: This is a long-term project to document and develop a new TRS system. The current system lacks flexibility and upgradability. The first phase of the project will be to contract with a vendor to identify the vulnerabilities and work with stakeholders to develop a gap analysis. This analysis will be used to develop a multi-stage plan to replace the current TRS system, while not compromising the needs of the current users and stakeholders. Anticipated Contract Schedule: Q1 2022 – Q4 2025 Anticipated Contract Cost: \$316,000 Funding Source: NHTSA Grant Funding

# Performance Measure: Accuracy The percentage of crash records with no errors in critical data element. Completeness The percentage of records with no missing critical data elements. Timeliness Reporting the time from receipt of paper reports to entry into the crash database. Total Project Cost: \$316,000

2020 NHTSA Traffic Records Assessment Recommendation	TRCC Goal/Projects/Objectives and Performance Measures  Goal #2: Information Sharing
Crash: Interfaces - Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.  2020 Assessment Score: 53.3%	Project: Improve Data Capture  Project Description: This project will improve the methods of capturing crash information in the field more quickly and efficiently. This includes reviewing the current electronic forms with subject matter experts and determining ways in which data capture can be further streamlined or enhanced and developing means to capture data from non-integrated systems.  TRCC Objectives:  Increase the uniformity and linking of data across all participating systems.  Reduce the time associated with the compilation of statistical reports to support traffic safety initiatives.  Provide better access to traffic record statistical information to state and local agency personnel.  Increase the number of statistical analysis tools available to state and local agency personnel.  Ensure the system is compatible with the emerging national traffic records information standards.  Leverage available state or agency infrastructure tools to minimize long-term costs.  Utilize an architecture that is both flexible for current needs and adaptable for future needs.  Contracts:  2.1 Paper Crash Report Data Entry: This project will provide for a company to perform the daily data entry of paper crash reports received from state and local law enforcement agencies.  Anticipated Contract Schedule: Q3 2021 – Q1 2022  Anticipated C
Crash: Procedures and Process Flows - Improve the procedures/process flows with the Crash	<ul> <li>Query principle users for timeliness satisfaction</li> <li>2.2 Paper Crash Report Scanning and Data Entry: This project will provide for a company to perform the sorting, scanning, destruction, and daily data entry of paper crash reports received from state and local law enforcement agencies.</li> <li>Anticipated Contract Schedule: Q1 2022 – Q4 2025</li> </ul>

flows with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Anticipated Contract Cost: \$316,000 Funding Source: NHTSA Grant Funding

#### Performance Measure:

Accuracy

• The percentage of crash records with no errors in critical data element.

2020 Assessment Score:	Completeness
74.2%	The percentage of records with no missing critical data elements.
	Timeliness
	Reporting the time from receipt of paper reports to entry into the crash database.
	Total Project Cost: \$376,000

2020 MUTO 1 T 65	
2020 NHTSA Traffic Records Assessment	TRCC Goal/Projects/Objectives and Performance Measures
Recommendation	Goal #3: Analytics
	Project Geo-location Capture/Recording
	<b>Description:</b> The Geometric & Crash Data Unit of KDOT will record the geolocation of crashes that occur on the state's 130,000 miles of local roads. This project will generate the data to identify crash locations and provide data for crash analysis and reporting.
	TRCC Objectives:
	Increase location accuracy for crash reports and other traffic events.
	<ul> <li>Increase the completeness of traffic data by capturing any missing information.</li> <li>Ensure the system is compatible with the emerging national traffic records information standards.</li> </ul>
	<ul> <li>Leverage available state or agency infrastructure tools to minimize long-term costs.</li> <li>Utilize an architecture that is both flexible for current needs and adaptable for future needs.</li> </ul>
Data Use and Integration - Improve the traffic records systems capacity to integrate data that reflects best practices identified in the Traffic Records Program Assessment Advisory.	Contracts:  3.1 GIS Mapping Integration: The University of Kansas Data Access and Support Center will receive crash data location extracts to precisely pinpoint map crashes utilizing GIS technology. The mapped crashes will then be integrated into the crash database for use by KDOT for analysis and the development of possible preventative safety measures.  Anticipated Contract Term: Q1 2021 – Q2 2025  Anticipated Contract Cost: \$1,126,954  Funding Source: NHTSA Grant Funding
2020 Assessment Score: 86.7%	Performance Measure:
	Accuracy
	The percentage of crash records with no errors in critical data element.
	<ul> <li>Completeness</li> <li>The percentage of records with no missing critical data elements</li> </ul>
	5 Year Total Project Cost: \$1,126,954

2020 NHTSA Traffic	TRCC Goal/Projects/Objectives and Performance Measures		
Records Assessment Recommendation	Goal #1: Traffic Safety Data		
	Project: Provide Ongoing Maintenance		
	<b>Description:</b> This project will support the maintenance for KBI / TRS systems. The work includes ensuring the operation of hardware, installation of software updates, and maintaining/ developing new interfaces as other systems evolve and are introduced. This ongoing effort is not designed to improve TRS specifically, the project is necessary to ensure that prior improvements are kept operational.		
	TRCC Objectives:		
	<ul> <li>Increase the uniformity and linking of data across all participating systems.</li> <li>Reduce the time associated with the compilation of statistical reports to support traffic safety initiatives.</li> </ul>		
	<ul> <li>Provide better access to traffic record statistical information to state and local agency personnel.</li> </ul>		
	<ul> <li>Increase the number of statistical analysis tools available to state and local agency personnel.</li> </ul>		
	<ul> <li>Ensure the system is compatible with the emerging national traffic records information standards.</li> </ul>		
	<ul> <li>Leverage available state or agency infrastructure tools to minimize long-term costs.</li> <li>Utilize an architecture that is both flexible for current needs and adaptable for future needs.</li> </ul>		
	Contracts:		
Data Use & Integration - Improve the traffic records systems capacity to integrate data that reflect best practices identified in the Traffic Records Program Assessment Advisory.	4.1 TRS Support: Components of the planned technical architecture have been deployed in production for configurations for eCitation, Record and Police Impaired Drivers (RAPID) and Department of Motor Vehicles. Staff will continue to be needed to support the TRS 2.0 Rebuild, RAPID, the eCite web service and data repositories for the long term.  Anticipated Contract Schedule: Q1 2021 – Q4 2025  Anticipated Contract Cost: \$350,000  Funding Source: State TREF		
2020 Assessment Score: 86.7%	Performance Measure: Integration  • Percentage of appropriate records that are linked to another system or file. Accessibility  • Query principle users for accessibility satisfaction		
	Query principle users for accessibility satisfaction		

5 Year Total Project Cost: \$350,000

2020 NHTSA Traffic Records Assessment Recommendation	TRCC Goal/Projects/Objectives and Performance Measures Goal #1: Traffic Safety Data
Crash: Applicable Guidelines - Improve the applicable guidelines for the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.  2020 Assessment Score: 80.0%	Project: MMUCC Alignment  Project Description: The MMUCC Alignment project will hire a contractor to map Kansas crash data elements (State Crash Report and Crash Database) to the Model Minimum Uniform Crash Criteria (MMUCC) most recent edition. The project will create a gap analysis and gap closure plan to attain High to Full compatibility ratings.  TRCC Objectives:  Increase the uniformity and linking of data across all participating systems.  Increase location accuracy for crash reports and other traffic events.  Increase the completeness of traffic data by capturing any missing information.  Ensure the system is compatible with the emerging national traffic records information standards.  Contracts:  5.1 MMUCC Alignment  Anticipated Contract Schedule: Q1 2023 – Q4 2024  Anticipated Contract Cost: \$300,000  Funding Source: NHTSA Grant Funding, State General Funds  Performance Measure:  Accuracy  The percentage of crash records with no errors in critical data element.  Completeness  The percentage of records with no missing critical data elements.

# Citation and Adjudication

2020 NHTSA Traffic	TRCC Goal/Projects/Objectives and Performance Measures				
Records Assessment Recommendation	Goal #2: Information Sharing				
	Project: Security Modernization Phase 2				
	<b>Project Description:</b> This project will integrate the core security applications into the Identity and Access Management solution, develop marketing and training material with the intent of promoting the security solution to a broader base of users that includes court clerks, emergency management organizations and other user groups seeking summarized KCJIS data.				
	TRCC Objectives:				
	<ul> <li>Provide secure access to traffic record statistical information to state and local agency personnel.</li> </ul>				
	Increase the number of statistical analysis tools available to state and local agency personnel				
	<ul> <li>Ensure the system is compatible with the emerging national traffic records information standards.</li> </ul>				
	<ul> <li>Leverage available state or agency infrastructure tools to minimize long-term costs.</li> <li>Utilize an architecture that is both flexible for current needs and adaptable for future needs.</li> </ul>				
	Contracts:				
Crash – Interfaces: Improve the interfaces, data dictionary and processes with the Crash data system that reflect best practices identified in the Traffic Records Program	<b>6.1 KCJIS Security Architecture:</b> This contract will continue to provide support for the execution of KBI's strategic plan as adopted by the Kansas Criminal Justice Information System (KCJIS) Committee for the modernization of the KCJIS Security Architecture in a phased manner. It will provide flexibility to our stakeholders, establish itself as a trusted security domain, and maintain strong security protocols.  Anticipated Schedule: Q1 2021 – Q1 2025 Anticipated Contract Cost: \$100,413				
Assessment Advisory.	Funding Source: NHTSA Grant Funding, State TREF, State General Fund				
2020 Assessment Score: 53.3%	Performance Measures: Integration: Percentage of records linked to another system or file.				
Crash Procedures and Process Flows: Improve the data dictionary of the Crash data system that reflect best	<b>6.2 KBI Security Architect Position:</b> This contract will develop and document current and future standards for data exchanges and coordinate with peer staff at partner agencies. The position will design enterprise level integration solutions and single system integrations and system interfaces and update the process flow chart.				
practices identified in the Traffic Records Program Assessment	Anticipated Contract Schedule: Q1 2021 – Q1 2025 Anticipated Contract Cost: \$675,000				
Advisory.	Funding Source: NHTSA Grant Funding, State TREF, State General Fund				
2020 Assessment Score: 74.2%	Performance Measure: Accessibility: Query principle users for accessibility satisfaction				
Crash Data Dictionary: Improve the data	<b>6.3 KCJIS ESB Interface Enhancement:</b> This contract will integrate an updated .xml formatted IEPD and update the data dictionary.				

dictionary and processes with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory -

2020 Assessment Score: 70.0%

Crash – Applicable
Guidelines: Improve the
applicable guidelines
for the Crash data
system that reflect best
practices identified in
the Traffic Records
Program Assessment
Advisory.

Assessment Score 80.0%

Anticipated Contract Schedule: Q1 2022 - Q1 2024

Anticipated Contract Cost: \$50,000

Funding Source: NHTSA Grant Funding, State TREF, State General Fund

#### Performance Measure:

Accessibility:

• Query principle users for accessibility satisfaction

Completeness:

• Percentage of crash records with no missing data elements.

**6.4 Identity and Access Management Integration:** This contract will implement the Identity and Access Management solution. It will provide trusted access to a broader range of users to access data contained in core databases.

Anticipated Contract Schedule: Q1 2023 – Q1 2025

Anticipated Contract Cost: \$250,000

Funding Source: NHTSA Grant Funding, State TREF, State General Fund

#### Performance Measures:

Accessibility

• Query principle users for accessibility satisfaction

Total Project Cost: \$1,075,413

Citation					
2020 NHTSA Traffic	TRCC Goal/Projects/Objectives and Performance Measures				
Records Assessment Recommendation	Goal #1: Traffic Safety Data				
	Project: Citation Automation Deployment				
	<b>Project Description:</b> This project provides the ongoing support for the citation automation system and focuses on developing data capture mechanisms to capture arrest and offense data electronically as close to the sources as possible. While the system currently supports the KHP KLER transactions, additional citation systems are in place in many local agencies. This project will provide the foundation for incorporating any number of citation systems which adhere to national incident-based reporting standards.				
	TRCC Objectives:				
	<ul> <li>Reduce the time associated with the compilation of statistical reports to support traffic safety initiatives.</li> </ul>				
	<ul> <li>Provide better access to traffic record statistical information to state and local agency personnel.</li> </ul>				
	<ul> <li>Increase the number of statistical analysis tools available to state and local agency personnel.</li> </ul>				
	• Ensure the system is compatible with the emerging national traffic records information standards.				
	<ul> <li>Leverage available state or agency infrastructure tools to minimize long-term costs.</li> <li>Utilize an architecture that is both flexible for current needs and adaptable for future needs.</li> </ul>				
Citation/Adjudication- Data Quality Control Programs: Improve the data quality control program for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment	Contracts: 7.1 KCJIS Support: The information sharing infrastructure platform of the Kansas Criminal Justice Information system's technical infrastructure is managed by the Kansas Bureau of Investigation. To support the need for expansion of information sharing capabilities for the crash database, connectivity to local law enforcement, driver, vehicle and citation/adjudication system databases, this project will reimburse payroll costs to assist in electronic capture and dissemination of data.  Anticipated Contract Schedule: Q2 2022 – Q2 2025 Anticipated Contract Cost: \$350,000 Funding Source: NHTSA Grant Funding, State TREF				
Advisory.	Performance Measure: Timeliness				
2020 Assessment Score: 68.4%	<ul> <li>Query principle users for timeliness satisfaction</li> <li>Accuracy</li> <li>Percent of citation records with no errors in critical data elements</li> </ul>				
Citation/Adjudication- Interfaces: Improve the procedures/ process flows for the Crash data system that reflect best practices identified in the Traffic Records	<b>7.2 KBI eCite Vendor:</b> The information sharing infrastructure utilizing the existing platform of the KCJIS system's technical infrastructure is managed by the Kansas Bureau of Investigation. To support the need for expansion of information sharing capabilities, there is a need to engage with eCite vendors to assist in the electronic capture and dissemination from local law enforcement or courts. This project will provide the software for local law enforcement agencies to submit electronic citation reports directly from their mobile data units.				

Program Assessment Advisory.

2020 Assessment Score: 40.5%

Anticipated Contract Schedule: Q2 2021 – Q2 2025

Anticipated Contract Cost: \$624,432

Funding Source: NHTSA Grant Funding, State TREF

#### Performance Measure:

Timeliness

• Query principle users for timeliness satisfaction

Accessibility

• Query principle users for accessibility satisfaction

# Citation/Adjudication – Procedures and Process Flows:

Improve the procedures/process flows of the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

2020 Assessment Score: 95.8%

# Citation/Adjudication – Description and Contents:

Improve the description and contents of the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

**7.3 KBI eCite Position:** The development of the eCitation project is proceeding per the TRS 2.0 Rebuild plan. Components of the planned architecture have been deployed in production and will soon be integrated with DMV access and other related systems. Per the TRS 2.0 plan, staff is needed to support the eCite web services and repositories for the long term. The total is for salary and benefits only.

Anticipated Contract Schedule: Q3 2020 – Q4 2025

Anticipated Contract Cost: \$387,000

Funding Source: State TREF

#### Performance Measure:

Timeliness

• Query principle users for timeliness satisfaction

Accessibility

Query principle users for accessibility satisfaction

**7.4 Electronic Citation Reporting:** The eCitation portion of this contract has a couple distinct objectives. This first is a secure, non-public we data entry portal within the KBI network to be used by authorized users to manually enter citation information to be housed in the eCitation Data Repository. The other part of the project will have local law enforcement or courts submitting their citation information electronically. eCitation will enhance the statewide electronic traffic citation prototype constructed in Phase 1B and implement the solution in a KCJIS production environment.

Anticipated Contract Schedule: Q4 2021 – Q4 2025

Anticipated Contract Cost: \$224,934 Funding Source: NHTSA Grant Funding

#### Performance Measure:

Timeliness

- Reporting for date of citation issuance compared to date of citation database entry Accuracy
  - Reporting providing number of data element error or missing information.

Total Project Cost: \$1,586,366

# Roadway

Roadway					
2020 NHTSA Traffic	TRCC Goal/Projects/Objectives and Performance Measures				
Records Assessment Recommendation	Goal #1: Traffic Safety Data				
	Project: Mire Alignment				
	Project Description: The MIRE Alignment project coincides with an Agency-wide effort to align KDOT's roadway elements and reporting systems with the Federal Highway Administration's Model Inventory Roadway Elements (MIRE) initiative. By adopting MIRE, State and local transportation agencies will be able to link safety data to non-safety data, making it easier to collect, store, link, and use all types of data. Having these additional data can help better identify where the safety problems are, what those problems are, and how best to treat them.				
	<ul> <li>TRCC Objectives:</li> <li>Increase the uniformity and linking of data across all participating systems.</li> <li>Increase location accuracy for crash reports and other traffic events.</li> <li>Increase the completeness of traffic data by capturing any missing information.</li> <li>Increase the number of statistical analysis tools available to state and local agency personnel.</li> <li>Ensure the system is compatible with the emerging national traffic records information standards.</li> </ul>				
Roadway-Description and Contents: Improve the description and contents of the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Contracts:  8.1 Lidar Data Capture: This project will contract with a vendor to physically drive the 130,000 miles of Kansas highways and capture several roadway elements utilizing LIDAR to accurately measure road and shoulder widths, intersection elements, and bridge heights among others. The element capture will also provide an accurate inventory of all roadway elements such as guardrail heights and lengths. This data will be used for providing highly accurate data to KDOT analysts to formulate safety measures to prevent crashes and fatalities.  Anticipated Contract Schedule: Q4 2021 – Q1 2024  Anticipated Contract Cost: \$1,000,000  Funding Source: NHTSA Grant Funding, State TREF, State General Funds				
2020 Assessment Score: 83.3%	Performance Measures: Accuracy				
	<ul> <li>The percentage of crash records with no errors in critical data element.</li> <li>Completeness</li> <li>The percentage of records with no missing critical data elements.</li> </ul>				
Roadway: Interfaces - Improve the applicable interfaces for the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	<ul> <li>8.2 LIDAR Data Integration: This project will contract with a vendor to configure the data capture to enable the integration into KDOT databases.</li> <li>Anticipated Contract Schedule: Q2 2023 – Q4 2025</li> <li>Anticipated Contract Cost: \$500,000</li> <li>Funding Source: NHTSA Grant Funding, State TREF</li> <li>Performance Measures: <ul> <li>Accuracy</li> <li>The percentage of crash records with no errors in critical data element.</li> </ul> </li> </ul>				

2020 Assessment Score: 91.7%

Roadway-Description and Contents: Improve the description and contents of the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory. **8.3 LIDAR Data Management:** This project will contract with a vendor to manage the database of LIDAR data.

Anticipated Contract Schedule: Q4 2021 – Q4 2025

Anticipated Contract Cost: \$300,000

Funding Source: NHTSA Grant Funding, State TREF

Performance Measures:

Completeness

Reporting to identify uncaptured roadways

Accuracy

• The percentage of crash records with no errors in critical data element.

2020 Assessment Score: 83.3%

Roadway-Description and Contents: Improve the description and contents of the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment **8.4 Surface Friction Data Capture**: This project will capture roadway surface friction of state and local highways in Kansas.

Anticipated Contract Schedule: Q2 2021 – Q4 2021

Anticipated Contract Cost: \$110,000 Funding Source: NHTSA Grant Funding

Performance Measures:

Completeness

Reporting to identify uncaptured roadways

2020 Assessment Score: 83.3%

Advisory.

# Injury/Surveillance

#### 2020 NHTSA Traffic Records Assessment Recommendation

#### TRCC Goal/Projects/Objectives and Performance Measures

Goal #1: Traffic Safety Data

#### Injury/Surveillance-Applicable Guidelines

Improve the applicable guidelines for the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Project: EMS/Injury Integration

**Project Description:** This project will develop interfaces to the Bio spatial interstate trauma database and border states to share EMS run reports and trauma registry. The platform will include the ability to link data sources with disparate fields, compare data between jurisdictions and highlight missing values. The analytics module will provide a means for states to benchmark performance both internally and among partnering states and features dashboard views with the ability to track up to 32 different performance measures.

#### TRCC Objectives:

2020 Assessment Score: 93.9%

- Increase the uniformity and linking of data across all participating systems
- Increase the completeness of traffic data by capturing missing information.
- Provide better access to traffic record statistical information to state and local agency personnel.
- Increase the number of statistical analysis tools available to state and local agency personnel.

#### • Leverage available state or agency infrastructure tools to minimize long-term costs

• Utilize an architecture that is both flexible for current needs and adaptable for future expansion needs.

#### Contracts:

#### Injury/Surveillance-Procedures and Process Flows:

Improve the procedures/ process flows for the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

2020 Assessment Score: 94.1%

#### 9.1 Bio-Spatial Interstate Trauma Database

Anticipated Contract Schedule: Q1 2021 – Q1 2025

Anticipated Contract Cost: \$150,000

Funding Source: NHTSA Grant Funds, State TREF

#### Performance Measure:

Integration:

• The percentage of appropriate records that are linked to another system or file Accessibility:

• Query principle users for accessibility satisfaction

Completeness:

• The percentage of records with no missing critical data elements

Total Project Cost: \$150,000

# Implementation Schedule & Anticipated Costs

Project #	Project Name	Agency	2021	2022	2023	2024	2025	Anticipated Costs
1.1	Information Exchange Packet Document	KDOT						\$80,000
1.2	TRS 2.0 Rebuild	KDOT						\$500,000
2.1	Paper Crash Report Scanning Data Entry (Data Dash)	KDOT, KDOR KBI						\$60,000
2.1	Crash Report Scanning & Data Entry (BTCO)	KDOT, KDOR KBI						\$316,000
<u>3.1</u>	GIS Mapping Integration	KDOT						\$1,126,954
4.1	TRS Support	KDOR, KDOT, District Court						\$350,000
<u>5.1</u>	MMUCC Alignment	KBI, KDOT						\$300,000
<u>6.1</u>	KCJIS Security Architecture	KDOT, KDOR KBI						\$100,413
<u>6.2</u>	KBI Security Architect Position	KDOT						\$625,000
<u>6.3</u>	KBI ESB Interface Enhancement	KBI						\$50,000
<u>6.4</u>	Identity Management and Access	KBI						\$250,000
7.1	KCJIS Support	KBI						\$350,000
7.2	KBI eCite Vendor	KBI, KHP						\$500,000
7.3	KBI eCite Position	KBI						\$387,000
7.4	Electronic Citation Reporting	KBI						\$224,000
8.1	LIDAR Data Capture	EMS						\$1,000,000
8.2	LIDAR Data Integration	KDOT						\$500,000
8.3	LIDAR Data Management	KDOT						\$300,000
8.4	Surface Friction Data Collection	KBI						\$110,000
9.1	Bio-spatial Interstate Trauma Database	KDOT						\$150,000
								\$7,279,799

# Appendix A: Table of Acronyms

Acronym	Definition			
AAMVA	American Association of Motor Vehicle Administrators			
ATSIP	Association of Transportation Safety Information Professionals			
BAC	Blood Alcohol Concentration			
BEMS	Board of Emergency Medical Services			
CANSYS	Control Section Analysis Section			
CIO	Chief Information Officer			
CITO	Executive Chief Information Technology Officer			
CJCC	Kansas Criminal Justice Coordinating Council			
CMS	Court Management System			
DMV	Division of Motor Vehicles			
CRE	Citation Record Entry			
DRE	Drug Recognition Expert			
DUI	Driving Under the Influence			
EMS	Emergency Medical Services			
ESB	Enterprise Service Bus			
GIS	Geographic Information System			
KanPlan	Not an acronym. Kansas Department of Transportation GIS Portal			
KBI	Kansas Bureau of Investigation			
KCC	Kansas Corporation Commission			
KCARS	Kansas Crash Analysis and Reporting System			
KCJIS	Kansas Criminal Justice Information System			
KDHE	Kansas Department of Health and Environment			
KDOR	Kansas Department of Revenue			
KDOT	Kansas Department of Transportation			
KEMSIS	Kansas Emergency Medical Services Information System			
KGATE	Not an acronym. Kansas Internet-based geospatial roadway representation.			
КНР	Kansas Highway Patrol			
K-Hub	Not an acronym. The planned KDOT roadway data management system.			
KIBRS	Kansas Incident-Based Reporting System			
KID	Kansas Insurance Department			
KLER	Kansas Law Enforcement Reporting			
KS	Kansas (postal abbreviation)			
LEA	Law Enforcement Agency			
LRS	Linear Reference System			

# Appendix A: Table of Acronyms

Acronym	Definition			
MIRE	Model Inventory of Roadway Elements			
MMUCC	Model Minimum Uniform Crash Criteria			
NHTSA	National Highway Traffic Safety Administration			
NIBRS	National Incident-Based Reporting System			
NIEM	National Information Exchange Model			
OJA	Office of Judicial Administration			
OLAP	Online Analytical Processing			
RAPID	Report and Police Impaired Drivers			
RMS	Records Management System			
SAFETYNET	Not an acronym. System provided to Kansas Highway Patrol to upload commercial vehicle			
SAFLITHLI	inspections and crashes to Federal Motor Carrier Safety Administration.			
SEO	Search Engine Optimization			
SOA	Service Oriented Architecture			
TREF	Traffic Records Enhancement Fund			
TRCC	Traffic Records Coordinating Committee			
TRS	Traffic Records System			
XML	Extensible Markup Language			

# Appendix B: 2020 Assessment Recommendations

Kansas elected to perform the NHTSA Self-Assessment in 2020. Assessment recommendations listed below reflect the results. Kansas has also developed a new strategic plan for the 2020 – 2024 planning cycle. Therefore, the plans detailed earlier in the report have been developed to address many of the recommendations from the 2020 assessment. Each project and contract list the applicable assessment the project is intended to address and the performance metric to be used to measure its progress.

2020 NHTSA Traffic Records Assessment Recommendation	Score	Project Number
Data Use & Integration Improve the traffic records systems capacity to integrate data that reflect best practices identified in the Traffic Records Program Assessment Advisory.	86.7%	4.1 TRS Support  Qualitative Measures: Integration, Accessibility
Crash – Description and Contents Improve the description and contents of the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	95.7%	The timeline for the Crash system description improvement has been extended due to interdependencies with other TRCC projects as well as resource availability.
Crash – Applicable Guidelines Improve the applicable guidelines of the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	80.0%	5.1 MMUCC Alignment  Qualitative Measures: Accuracy, Completeness  6.4 Security Modernization Phase 2: Identity Management and Access  Qualitative Measurement: Accessibility
Crash – Data Dictionary  Improve the data dictionary of the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	70.0%	6.3 KBI ESB Enhancement  Qualitative Measure: Accessibility, Completeness
Crash – Procedures and Process Flows Improve the data dictionary of the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	74.2%	1.2 TRS2.0 Rebuild  Qualitative Measures: Accuracy, Completeness, Timeliness  2.2 Paper Crash Report Scanning & Data Entry  Qualitative Measures: Accuracy, Completeness, Timeliness  6.2 KCJIS Security Architecture  Qualitative Measures: KBI Security Architect Position  Qualitative Measures: Accessibility

Crash — Interfaces	53.3%	1.1 Electronic Exchange Packet Document
Improve the interfaces of the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.		Qualitative Measure: Accuracy, Completeness
		2.1 Paper Crash Report Data Entry
		Qualitative Measures: Accuracy, Completeness, Timeliness
		6.1 KCJIS Security Architecture
		Qualitative Measures: Integration
Driver – Data Dictionary Improve the data quality control program of the Driver data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	83.3%	The TRCC will take this recommendation under advisement and consider potential strategies for documenting the data dictionary that support traffic safety data.
Driver – Interfaces	86.7%	The TRCC will take this recommendation
Improve the interfaces of the Driver data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.		under advisement and consider potential strategies for developing Driver Interfaces that support traffic safety data interfaces.
Driver – Data Quality Improve the interfaces of the Driver data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	76.9%	The KDOR recently completed a multi-year system replacement of Driver and Vehicle systems. This recommendation will be addressed as resources and funding sources are available.
Vehicle – Applicable Guidelines Improve the applicable guidelines of the Vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	51.5%	The KDOR recently completed a multi-year system replacement of Driver and Vehicle systems. This recommendation will be addressed as resources and funding sources are available.
Vehicle – Procedures and Process Flows Improve the data dictionary of the Vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	70.0%	Stolen vehicles are not flagged or reported through their system. The TRCC will take this recommendation for potential strategies to improve procedures and process flows of traffic safety data.
Vehicle – Interfaces	33.3%	Driver and Vehicle systems are separate
Improve the interfaces of the Vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.		systems and do not interface. The KDOR recently completed a multi-year system replacement of Driver and Vehicle systems. This recommendation will be addressed as resources and funding sources are available.
Roadway – Description and Contents Improve the description and contents of the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	93.3%	8.1 Lidar Roadway Data Capture Qualitative Measures: Accuracy, Completeness  8.3 LIDAR Data Management
Records Program Assessment Advisory.		8.3 LIDAR Data Management

Decahusu Applicable Cuidelines	83.3%	Qualitative Measures: Accuracy, Completeness  8.4 Surface Friction Data Collection Qualitative Measures: Completeness The TRCC will work to identify potential
Roadway – Applicable Guidelines Improve the applicable guidelines of the Vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	65.570	strategies that demonstrate the effectiveness of the Roadway data systems for traffic safety improvements.
Roadway – Interfaces Improve the interfaces of the Vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	91.7%	The TRCC will work to identify potential strategies that improve the interfaces of the Roadway data systems for traffic safety improvements.
Citation and Adjudication – Description and Contents Improve the description and contents of the citation and adjudication data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	52.6%	7.4 Electronic Citation Reporting  Qualitative Measures: Timeliness, Accuracy
Citation and Adjudication – Interfaces	40.5%	7.2 KBI eCite Vendor
Improve the interfaces of the citation and adjudication data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.		Qualitative Measures: Timeliness, Accessibility
Citation and Adjudication – Data Quality Control Programs Improve the data quality control programs of the citation and adjudication data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	68.4%	7.1 KCJIS Support  Qualitative Measures: Timeliness, Accuracy
Injury Surveillance – Applicable Guidelines	93.9%	9.1 EMS/Injury Integration
Improve the applicable guidelines of the injury surveillance system that reflect best practices identified in the Traffic Records Program Assessment Advisory.		Qualitative Measures: Integration, Accessibility, Completeness
Injury Surveillance – Interfaces	94.1%	9.1 Bio-Spatial Interstate Trauma Database
Improve the interfaces of the injury surveillance data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.		Qualitative Measures: Integration, Accessibility, Completeness